

## Bodhitha Jayatilaka

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EDUCATION	<b>University of Michigan</b> , Ann Arbor, Michigan USA Ph.D. Physics, 2006 <ul style="list-style-type: none"><li>• Dissertation: “A Measurement of the Top Quark Mass in the Dilepton Decay Channel at CDF II”</li><li>• Advisor: Prof. David Gerdes</li></ul> M.S., Physics, May 2004  <b>University of California</b> , Berkeley, California USA B.A., Physics, May, 2002	
RESEARCH EXPERIENCE	<b>Fermilab</b> , Batavia, Illinois USA <i>Scientific Computing Division</i> Applications Physicist II Applications Physicist I	<b>2016 - present</b> <b>2012 - 2016</b>
	<b>Massachusetts Institute of Technology</b> , Cambridge, Massachusetts USA <i>Laboratory for Nuclear Science</i> Visiting Scientist	<b>2014 - present</b>
	<b>Duke University</b> , Durham, North Carolina USA <i>Physics Department</i> Research Scientist Postdoctoral Research Associate	<b>2011 - 2012</b> <b>2006 - 2011</b>
	<b>University of Michigan</b> , Ann Arbor, Michigan USA <i>Physics Department</i> Graduate Student Research Assistant	<b>2003 - 2006</b>
	<b>Lawrence Berkeley National Laboratory</b> , Berkeley, California USA <i>Physics Division</i> Research Associate Student Research Assistant	<b>2002</b> <b>2001 - 2002</b>
PROFESSIONAL RESPONSIBILITIES	Data movement and storage deputy department head, Fermilab Open Science Grid area coordinator for production support Open Science Grid production analyst Standard model physics co-convener, CDF Collaboration Long-term preservation of the Tevatron data. Project technical co-lead for CDF Operations manager, CDF experiment W boson mass and width working group co-convener, CDF experiment Calibrations coordinator, CDF experiment	2016 - present 2015 - 2016 2014 - 2016 2013 - present 2012 - 2014 2011 2008 - 2012 2007 - 2008

SCIENTIFIC COLLABORATIONS	CMS Experiment Dark Energy Survey ATLAS Experiment CDF Experiment	2014 - present 2013 - 2014 2012 2003 - present
HONORS AND AWARDS	2012 Alvin Tollestrup Award for postdoctoral research excellence. Awarded for “leadership and significant contribution to the measurement of the $W$ mass with the CDF experiment.”	
PUBLICATIONS	<p><i>I list here publications I have had major contribution to in the form of analysis, student mentorship or analysis review.</i></p> <p>T. Aaltonen <i>et al.</i> (CDF Collaboration), “A precise measurement of the <math>W</math>-boson mass with the Collider Detector at Fermilab,” Phys. Rev. D <b>89</b>, 072003 (2014) [arXiv:1311.0894].</p> <p>T. Aaltonen <i>et al.</i> (CDF and DØ Collaborations) “Combination of CDF and DØ <math>W</math>-boson mass measurements,” Phys. Rev. D <b>88</b>, 052108 (2013) [arXiv:1307.7627].</p> <p>T. Aaltonen <i>et al.</i> (CDF and DØ Collaborations) “Evidence for a Particle Produced in Association with Weak Bosons and Decaying to a Bottom-Antibottom Quark Pair in Higgs Boson Searches at the Tevatron,” Phys. Rev. Lett. <b>109</b>, 071804 (2012). <i>PRL Editors’ Suggestion</i> [arXiv:1207.6436]</p> <p>T. Aaltonen <i>et al.</i> (CDF Collaboration), “Combined Search for the Standard Model Higgs Boson Decaying to a <math>b\bar{b}</math> Pair Using the Full CDF Data Set,” Phys. Rev. Lett. <b>109</b>, 111802 (2012). [arXiv:1207.1707]</p> <p>T. Aaltonen <i>et al.</i> (CDF Collaboration), “Search for the Standard Model Higgs Boson Decaying to a <math>b\bar{b}</math> Pair in Events with Two Oppositely Charged Leptons Using the Full CDF Data Set,” Phys. Rev. Lett. <b>109</b>, 111803 (2012). [arXiv:1207.1704]</p> <p>T. Aaltonen <i>et al.</i> (CDF Collaboration), “Search for the Standard Model Higgs Boson Produced in Association with a <math>Z</math> boson in <math>7.9\text{ fb}^{-1}</math> of <math>p\bar{p}</math> Collisions at <math>\sqrt{s} = 1.96\text{ TeV}</math> Using the CDF II Detector,” Phys. Lett. B <b>715</b>, 98 (2012).</p> <p>T. Aaltonen <i>et al.</i> (CDF Collaboration), “Precise Measurement of the <math>W</math> Boson Mass with the CDF II Detector,” Phys. Rev. Lett. <b>108</b>, 151803 (2012). <i>PRL Editors’ Suggestion</i>. [arXiv:1203.0275]</p> <p>T. Aaltonen <i>et al.</i> (CDF Collaboration), “Search for New Phenomena in Events with Two <math>Z</math> Bosons and Missing Transverse Momentum in <math>p\bar{p}</math> Collisions at <math>\sqrt{s} = 1.96\text{ TeV}</math>,” Phys. Rev. D <b>85</b>, 011104(R) (2012) [arXiv:1112.1577]</p> <p>T. Aaltonen <i>et al.</i> (CDF Collaboration), “Top Quark Mass Measurement in the Lepton + Jets Channel Using a Matrix Element Method and <i>in situ</i> Jet Energy Calibration,” Phys. Rev. Lett. <b>105</b>, 252001 (2010). [arXiv:1010.4582]</p> <p>T. Aaltonen <i>et al.</i> (CDF Collaboration), “Improved Search for a Higgs Boson Produced in Association with <math>Z \rightarrow l^+l^-</math> in <math>p\bar{p}</math> Collisions at <math>\sqrt{s} = 1.96\text{ TeV}</math>,” Phys. Rev. Lett. <b>105</b>, 251802 (2010). [arXiv:1009.3047]</p> <p>T. Aaltonen <i>et al.</i> (CDF Collaboration), “A Search for the Higgs Boson Produced in Association with <math>Z \rightarrow \ell^+\ell^-</math> Using the Matrix Element Method at CDF II,” Phys. Rev. D <b>80</b>, 071101(R) (2009). [arXiv:0908.3534]</p> <p>T. Aaltonen <i>et al.</i> (CDF Collaboration), Top Quark Mass Measurement in the <math>t\bar{t}</math> All Hadronic</p>	

Channel Using a Matrix Element Technique in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV,” Phys. Rev. D **79**, 072010 (2009). [arXiv:0811.1062]

T. Aaltonen *et. al.* (CDF Collaboration), “Measurement of the Top-Quark Mass with Dilepton Events Selected Using Neuroevolution at CDF,” Phys. Rev. Lett. **102**, 152001 (2009). [arXiv:0807.4652]

T. Aaltonen *et. al.* (CDF Collaboration), “First Run II Measurement of the  $W$  Boson Mass at the Fermilab Tevatron,” Phys. Rev. D. **77**, 112001 (2008). [arXiv:0708.3642]

T. Aaltonen *et. al.* (CDF Collaboration), “First Measurement of the  $W$  Boson Mass in Run II of the Tevatron,” Phys. Rev. Lett. **99**, 151801 (2007). [arXiv:0707.0085v1]

A. Abulencia, *et. al.* (CDF Collaboration), “Precision Measurement of the Top-Quark Mass from Dilepton Events at CDF II,” Phys. Rev. D. **75** 031105(R) (2007). [hep-ex/0612060]

A. Abulencia, *et. al.* (CDF Collaboration), “Top-Quark Mass Measurement from Dilepton Events at CDF II,” Phys. Rev. Lett. **96**, 152002 (2006). [hep-ex/0512070]

A. Abulencia, *et. al.* (CDF Collaboration), “Top-Quark Mass Measurement from Dilepton Events at CDF II Using the Matrix-Element Method,” Phys. Rev. D. **74**, 032009 (2006). [hep-ex/0605118]

J. Antos, *et. al.*, “Data Production Models for the CDF Experiment,” IEEE Trans. Nucl. Sci. **53** 2897 (2006). [hep-physics/0606042]

*In addition to the above, I have been a member of the CDF collaboration author list since January 2005 and the CMS collaboration author list since August 2015 with over 400 publications.*

INVITED  
CONFERENCE AND  
SEMINAR  
PRESENTATIONS

“Taking HEP data management outside of HEP.” CHEP 2016, San Francisco, California, USA, October 11, 2016

“The OSG Open Facility: An on-ramp for opportunistic scientific computing.” CHEP 2016, San Francisco, California, USA, October 10, 2016

“Searches for Dark Matter Production with CMS.” LHCP 2016, Lund, Sweden. On behalf of the CMS collaboration, June 17, 2016

“Data preservation at the Fermilab Tevatron,” DPF 2015, Ann Arbor, Michigan, USA, August 6, 2015

“Data preservation at the Fermilab Tevatron,” CHEP 2015, Okinawa, Japan, April 14, 2015

“The OSG open facility: A sharing ecosystem,” CHEP 2015, Okinawa, Japan, April 13, 2015

“ $M_W$ ,  $Z$   $A_{FB}$ , and  $W/Z$  Production,” LHCP 2014, New York, New York, USA. Invited plenary talk on behalf of the ATLAS, CMS, CDF, and DØ Collaborations. June 7, 2014.

“Tevatron data preservation,” Joint DASPOS/DPHEP workshop, CERN. March 21, 2013.

“Legacy electroweak results from the Tevatron,” Invited seminar, University of Cincinnati, November 19, 2013.

“Colliders and their window into the universe: the past, present, and future,” Invited colloquium, Saginaw Valley State University, February 19, 2013.

“Precision measurement of the  $W$  boson mass at CDF” Invited seminars: Argonne National Lab, March 28, 2012; University of California, Los Angeles, April 3, 2012; University of California, Irvine, April 4, 2012; SLAC National Accelerator Laboratory, May 8, 2012; Northwestern University, May 21, 2012; University of California, Davis, June 4, 2012; University of Notre Dame, September 4, 2012; Michigan State University, September 11, 2012; LAPP Annecy, October 5, 2012; University of Birmingham, October 10, 2012; University of Warwick, October 11, 2012; MIT, November 5, 2012; Harvard University, November 7, 2012; Wayne State University, February 15, 2013.

“Recent results from the Tevatron” 2nd MCTP Symposium on Higgs Boson Physics, Ann Arbor, Michigan USA. Invited Plenary talk on behalf of the CDF and DØ Collaborations. April 19, 2012.

“Measurement of the  $W$  boson mass at CDF” 2012 Rencontres de Moriond: Electroweak. La Thuile, Italy. Invited plenary talk on behalf of the CDF Collaboration. March 7, 2012.

“Precision measurement of the  $W$  boson mass at CDF” 2012 Les Rencontres de Physique de la Vallée d’Aoste. La Thuile, Italy. Invited plenary talk on behalf of the CDF Collaboration. March 1, 2012.

“Combination of Standard Model Higgs Boson searches at the Tevatron” 2011 Rencontres de Moriond: Electroweak. La Thuile, Italy. Invited plenary talk on behalf of CDF and DØ Collaborations. March 13, 2011.

“Searching for the Standard Model Higgs Boson at CDF” Invited seminars: Columbia University. New York, New York USA. March 31, 2010; University of California, Irvine. Irvine, California USA. June 2, 2010.

“Search for the Low Mass Standard Model Higgs Boson at the Tevatron” Aspen Particle Physics 2010. Aspen, Colorado USA. Invited plenary talk on behalf of the CDF and DØ Collaborations. January 19, 2010.

“Search for  $VH \rightarrow \cancel{E}_T + b\bar{b}$  at the Tevatron” Meeting of the APS Division of Particles and Fields. Detroit, Michigan USA. Invited talk on behalf of the CDF and DØ Collaborations. July 27, 2009.

“Tevatron Electroweak Results and Top Quark Properties” 42nd Annual Fermilab Users’ Meeting. Batavia, Illinois USA. Invited plenary talk on behalf of the CDF and DØ Collaborations. June 3, 2009.

“Precision Electroweak Measurements at the Tevatron” DIS 2009: 17th International Workshop on Deep-Inelastic Scattering and Related Subjects. Madrid, Spain. Invited talk on behalf of the CDF and DØ Collaborations. April 27, 2009.

“Top Quark Mass Measurements in the Dilepton and Alljets Channels” ICHEP 2008: 34th International Conference in High Energy Physics. Philadelphia, Pennsylvania USA. Invited talk on behalf of the CDF and DØ Collaborations. July 30, 2008.

“Precision Measurements of the Top Quark Mass in the Dilepton Channel” Top 2006, International Workshop on Top Quark Physics, Coimbra, Portugal. Invited plenary talk on behalf of CDF and DØ Collaborations. January 12, 2006.

CONFERENCE AND  
WORKSHOP  
COMMITTEES

“Beyond Leading Order Calculations on HPCs.” Batavia, Illinois, USA. September 22 - 23, 2016.  
Local Organizing Committee Member

“International Symposium on Grids and Clouds 2016.” Taipei, Taiwan. March 13 - 18, 2016.  
Program Committee Member